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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/587,103	06/02/00	BURTON	2000B027

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EXAMINER
MANOHARAN, V

ART UNIT	PAPER NUMBER
1764	

DATE MAILED: 08/13/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/587,103

Applicant(s)
BURTON ET AL

Examiner
VIRGINIA MANOHARAN

Art Unit
1764



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Nov 6, 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4 20) ☐ Other:

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The abstract of the disclosure is objected to because of the inclusion of legal phraseology often used in patent claims. For example : "comprising" recited in line 6. Correction is required. See MPEP § 608.01(b).

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors e.g. typographical grammar, idiomatic, syntax and etc. Applicants' cooperations are requested in correcting any errors of which applicants may become aware in the specification.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) The claimed "at least about 99.9 wt % isopropyl alcohol" in claim 1(a) is indefinite as there is no indication as to what range of specific activity is covered by the term "about". See MPEP 2173.05 (b) : See also claims 10-11 and 20 with the term "about".

(b) Claim 1 (c), (i) and (ii), as recited, are inconsistent with claim 1 (b) recitation. Claim 1 (b) would presuppose taking out the isopropyl alcohol as an overhead stream. On the other hand, claim 1 (c), (i) and (ii) would presupposed taking out said alcohol as a side stream, i.e. below the feed stream but above the bottoms stream as recited in (i) and above the feedstream but below the overhead as recited in (ii) which would be presupposed for a side stream withdrawal point not an overhead withdrawal as initially recited in claim 1 (b).

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- (c) The colons in the Markush languages in claims 2-3, 5-6, 12-13 and 15-17 should be deleted.
- (d) Claim 9, as recited, provides for ambiguity i.e., what's the difference in wt % between the overhead and the bottoms stream for separation. Also, what constitute the bottoms stream within the context of the claimed invention.
- (e) Claim 10 provides for confusion because of the following reasons
 - (1) The ternary azeotrope was not specified in the claims.
 - (2) What's the overhead & bottoms stream products of the distilling step?

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kagiya et al or Marker with or without Adams et al.

Either Kagiya et al or Marker discloses substantially the process as claimed. See e.g., cols 2-7 of Kagiya et al and the claims at cols. 15-16 of Marker.

The process of Kagiya et al or Marker differs from the claimed invention in that claim 1 for example, recites in the "wherein" clause that "said high purity isopropyl alcohol has a metal contents of less than about 1 ppb and a water content of less than about 100 ppm".

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However, said difference is deemed not to constitute a patentable distinction. By now, it is well- settled that the starting material and the product obtained maybe new and unobvious, however, "product" does not impart patentability to the process of Kagiya et al or Marker. See in re Durden et al 226 USPQ 359. Nonetheless, Adams et al is applied to teach that said desired product result is not unobvious nor is it evidence of criticality in the art i.e., isopropyl alcohol is purified to an ultradry and ultra pure level. See the abstract. To incorporate Adams et al teaching to the process of Kagiya et al or Marker would have been obvious to one of ordinary skill in the art in as much as all the references are directed to the same processing environment i.e., to a process for the purification of IPA.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- (a) Litzen discloses a process for the purification of isopropyl alcohol.
- (b) Kurokawa et al discloses a process for producing ultra-pure water.
- (c) JP '948 abstract teaches the purification of alcohol wherein the IPA contains e.g., .01-1 ppt metals and 20- 200 ppm water.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to V. Manoharan whose telephone number is (703) 308-3844. The examiner can normally be reached on Monday - Friday from 6:30 A.M. to 3:00 P.M..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Marian Knode, can be reached on (703) 308-4311. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

V. Manoharan /nh

August 9, 2001


VIRGINIA MANOHARAN
PRIMARY EXAMINER
ART UNIT 1821/764
8/13/01